Females:	Wing.	Tail.	Cul- men from cere.	Tar- sus.	Middle toe.
4 adults from eastern U.S	282	160.8	19.5	58.5	32.7
11 adult from Mirador, Vera Cruz, Mex.	293	167		61.5	33.5
1 ¹ adult Chitra, Veragua	280	163.5	20	64	30.5
2 adults from Cuba	272	160.8	20.5	62	33.3
4 adults from St. Vincent	265	153.9	18.6	56.2	32.5
1 adult from Dominica	263	154	20	57	32.5
1 immature, marked male but probably					
female, Granada	276	163	19.5	55.5	33.5
1 immature from Tobago	271	171	_	60	30
3 immatures from Antigua	252	149.2	18.7	57.7	31

RECENT NOTES ON BIRDS OF EASTERN PENN-SYLVANIA.

BY RICHARD C. HARLOW.

The ever changing conditions which are so rapidly encompassing large tracts of our commonwealth naturally necessitate faunal changes. The instinct of faunal distribution in many cases is sacrificed to the greater demand for congenial environment. In this respect different localities affect different divisions of bird life. Among the mountains of Pennsylvania, for instance, we find the element of the Canadian Fauna in the shape of numerous Warblers, Thrushes and Flycatchers steadily decreasing while about Philadelphia it is the Water Birds that have to bear the weight of the onslaught. The cutting off of the large timber has affected the Herons; the draining and filling up of the swampy areas has compelled the Rails to seek other localities, but the Land Birds live on, for the greater part unmolested.

Since Mr. Stone's valuable work on the 'Birds of Eastern Penn-

¹ Unsexed.

sylvania and New Jersey' was published in 1894 no great changes in the bird life of this region have been noticed. But as increased observation renders an increasing amount of valuable ornithological records, it has been deemed advisable by the writer to place on record the following notes, both as a record of present conditions and as a legacy for future reference. Eyesight records have been used at times when specimens were not available but only when the identification was carefully made under favorable circumstances and was practically undeniable. No attempt at an extended list has been made, the species noted being merely those of especial interest to the ornithologist. Practically all the varieties recorded in the following list were taken or observed within twelve miles of the city of Philadelphia and in the counties of Montgomery, Philadelphia and Delaware.

Herodias egretta. American Egret.— The Egret is now one of the rarest of Pennsylvania birds. In former years a few were noted annually in late July and August along the larger streams, but the species is now on the verge of extinction and as its appearance is usually heralded with a charge of shot, it is not likely to increase within our limits. I observed one of these magnificent birds at the Bristol Mill Pond on July 20, 1906, and on July 30, 1906, two were seen together on a pond near Ashbourne, Montgomery County. One of these was shot by a boy, and the wings and head afterward examined by the writer.

Accipiter atricapillus. Goshawk.— Large numbers of this hawk invaded Pennsylvania during the month of December, 1906, and not a few found their way into the hands of Philadelphia taxidermists. The writer secured one specimen on January 5, 1907, at Edge Hill, Montgomery Co., from a farmer who had the bird nailed to his barn. All birds seen were in fully adult plumage. The Goshawk is usually a rare winter visitant, but has a decided tendency to occur in 'waves.'

Archibuteo lagopus sancti-johannis. Rough-legged Hawk.—In former years this was a common winter resident on the Delaware Meadows. It has frequently been reported by observers but very few specimens have been taken in recent years, and it is likely that not a few Rough-leg records have in reality been immature Redtails. It is now an uncommon species.

Falco columbarius. Pigeon Hawk.— A Pigeon Hawk was shot by Mr. James Camblos at Fort Washington, Montgomery Co., in late September, 1904. Recognizing the rarity of the bird, Mr. Camblos had it mounted and later presented it to the writer. This specimen has the adult slate-colored back and is the only authentic record for this section in several years.

Asio wilsonianus. Long-eared Owl.—The Long-eared Owl seems to be more common in the last two years than formerly. It has been found to be a frequent winter resident within the city limits, while about Edge Hill it is a rather common bird in late fall and through the winter, and undoubtedly nests. Specimens in the writer's possession were taken January 6, 1907, and November 9, 1907. On November 9, 1906, I flushed nine of these owls from an oak sapling to which the dead leaves still clung. The ground beneath was littered with mice pellets.

Asio accipitrinus. Short-eared Owl.—Frequent migrant and winter resident, occurring in small colonies wherever there is an abundance of field mice. Usually leaves by April 1. One observed at Edge Hill, April 19, and again May 28, 1907 (Auk, Vol. XXIV, pp. 438, 439). A specimen in my collection was taken December 6, 1907, at Bridesburg; most common in the river marshes.

Nyctala acadica. Saw-whet Owl.— Contrary to the experience of most local ornithologists the writer has found this to be a not uncommon winter resident. Owing to its small size and unobtrusive habits it may be easily overlooked. Specimens have been examined which were taken at Oak Lane on October 25 and November 20, 1903; February 6, 1904, and October 28, 1905, while examples have been noted but not secured on January 2, 1905, and November 9, 1906.

Nyctea nyctea. Snowy Owl.—This large wanderer from northern latitudes is taken annually in the vicinity of Philadelphia, its large size commanding instant recognition. It was especially common along with the flight of Goshawks in December, 1906, when a number were taken about and even in the city. All birds recorded were heavily spotted and no immaculate specimens have been seen from this locality.

Sphyrapicus varius. Yellow-bellied Sapsucker.— Though

not infrequently recorded, this sapsucker was not met with as a winter resident until December 28, 1906, at Edge Hill, when one was observed at fairly close range but not collected.

Melanerpes erythrocephalus. Red-headed Woodpecker.— In former years this species was considered as a rare bird during the winter season. Recent observations have shown that it winters regularly, if not commonly, in suitable localities in the counties of Philadelphia, Montgomery and Delaware.

Sayornis phæbe. Phæbe.— One seen at Oak Lane on January 20, 1905, seems to be the only recent winter occurrence of the Phæbe, although I have seen it as late as December 25, 1907, this last year. Probably occurs regularly in small numbers during mild winters.

Empidonax minimus. Least Flycatcher.— The Chebee is given a place in the breeding birds of Montgomery County on the basis of my observations in 1906. On June 1, one heard in an apple orchard was supposed to be a late migrant. Passing that way again on July 3, 1906, the bird was again seen and while watched, was observed to feed a full-fledged young one, which was perched on an apple limb. Neither of them were secured but the record is indisputable and is the first for the breeding of this species in Montgomery County.

Corvus ossifragus. Fish Crow.—The Fish Crow appears to be spreading in the vicinity of Philadelphia where it may be found at all seasons of the year, in the winter mingling with the Common Crows and partaking of their habits. Nests most frequently along the Delaware and Schuylkill but frequently back from the rivers. A number build their homes in the parks in the very heart of Philadelphia. Probably more abundant on the Tinicum marshes to the south of the city than elsewhere. It was established as a breeder at that place on April 16, 1907, when the writer took a nest and five eggs along with the female.

Sturnus vulgaris. Starling.— For years we have been waiting the occurrence of this bird in Philadelphia and now it has come. Whether or not it will prove an agreeable addition to our avifauna is an open question, but Philadelphia bird students have certainly watched for it longingly. Its first occurrence in the city was early in December, 1907, when Mr. Axe, of Frankford, informed us of

mounting two which were captured in that locality. Since that time several more have been noted in various parts of the city.

Dolichonyx oryzivorus. Bobolink.— Apparently extending its range to the southward. Formerly a characteristic bird of the Alleghanian and Canadian faunas, it has recently been found to be a fairly common summer resident in south-central Bucks County and within twenty miles of Philadelphia. Has been noted through the summer of 1907 on the Tinieum meadows.

Agelaius phœniceus. Redwing.— Winter records are rare enough to make it desirable to mention a specimen taken at Tinicum, January 20, 1906, by Mr. Paul Lorrilliere.

Euphagus carolinus. Rusty Blackbird.— A not uncommon winter resident on the Tinicum meadows, usually noted in flocks. Perfectly regular.

Pinicola enucleator leucura. Pine Grosbeak.— A flock of ten individuals was seen by the writer on November 18, 1903, and two specimens were secured but not preserved. One of these was a mature male. The birds were not shy, feeding in a catalpa tree and, when alarmed, took flight uttering their clear, musical whistle. The Pine Grosbeak is a very rare bird in this locality and this is the third record.

Loxia leucoptera. White-winged Crossbill.—A flock of about eight crossbills of this species were seen in a clump of spruce trees, at Ashbourne on December 1, 1903. One specimen was secured.

Acanthis linaria. Redpoll.—An erratic winter visitant. Occurred in flocks of immense numbers during late February, 1907, during which time it was noted at numerous localities about the city. I observed one flock of eight hundred or more on February 20 and secured seven specimens. This flock was still in the same locality on March 5. The habits and notes of the Redpoll are very similar to those of the Goldfinch. All the specimens secured are referable to this race. It is important, however, that all Pennsylvania Redpolls should be closely examined as there is a possibility of other forms being taken.

Passerina nivalis. Snowflake.— Erratic winter visitant usually occurring in "waves." A number of flocks were observed about Philadelphia during February, 1905. A small bunch of about twenty were noted on February 25 and 26 at Oak Lane.

Calcarius lapponicus. Lapland Longspur.— One individual of this variety was observed on November 22, 1904, at Frankford, Philadelphia County, by Richard F. Miller. This is the third record from southeastern Pennsylvania, the others being one secured in 1849 by John Cassin, and a specimen taken by C. D. Wood in 1864 (Cassinia, 1906, p. 63). Though the specimen was not secured I have full faith in Mr. Miller's identification.

Powcetes gramineus. Vesper Sparrow.— A specimen secured at Edge Hill by the writer on December 28, 1907, makes an addition to the few winter records.

Melospiza georgiana. Swamp Sparrow.— Generally supposed to be a scarce winter resident. Recent developments have shown that they winter abundantly and regularly on the Tinicum meadows.

Pipilo erythrophthalmus. Chewink.— A rare winter resident. Specimens observed at Tinicum, December 18, 1905, and January 20, 1906.

Riparia riparia. Bank Swallow.— At the time of publication of Mr. Stone's book, this was thought to be a rare breeder. It is now ascertained to be an abundant though local summer resident. Colonies breed at Ridley Park and Chester, Delaware County.

Lanius borealis. Northern Shrike.— Observed one specimen on February 22, 1905, at Oak Lane.

Lanius ludovicianus migrans. MIGRANT SHRIKE.— One specimen referable to this race was taken at Edge Hill, on December 1, 1906, by the writer.

Dendroica discolor. Prairie Warbler.— Several specimens were observed on September 18 and 19, 1907, and one immature female was secured which is now in the writer's collection. Notwithstanding the fact that the Prairie Warbler is a common summer resident across the Delaware, in New Jersey, it is at all seasons a rare bird at Philadelphia. Apparently more common in spring than fall. The above specimen seems to be the only fall record for Montgomery County.

Geothlypis agilis. Connecticut Warbler.— Erratic fall migrant. No recent spring captures. The Connecticut Warbler was exceedingly common in the fall of 1907, and specimens were secured on September 18, 19 and October 7. All birds examined were exceedingly fat.

Geothlypis philadelphia. Mourning Warbler.— One individual of this bird was observed at close range at Edge Hill on May 12, 1907, and another at Oak Lane on May 31, 1907. These are my only records of this species and the bird will have to be regarded as a very rare migrant. Both identifications were made with great care.

Sitta canadensis. Red-breasted Nuthatch.— This erratic bit of bird life was unusually abundant in the fall of 1906, and from September until late November was seen on practically every field trip. These periodical invasions of Red-breasted Nuthatches seem worthy of note. The last one of any size occurred in 1903. For several years the bird will be rare and then, again, take a place among our common transients.

Hylocichla fuscescens. Wilson's Thrush.— The Veery formerly nested in the vicinity of Glenside, Montgomery County, which is the most southern locality of its breeding in Pennsylvania. Several times in the past two years the writer has heard in June and July notes which he was practically sure belonged to this bird but was unable to secure any specimens.

BIRDS OF DELAWARE—ADDITIONAL NOTES.¹

BY C. J. PENNOCK.

THE 'Preliminary List of the Birds of Delaware,² was intended to embrace such species only as had come under the observation of the authors or for which they could find positive record of an occurrence within the State. On account of the limited amount of time that had been devoted to the work previous to the appearance of that list it was evident that many species of birds remained to be noted and some species recorded therein as rare might become apparently more abundant after further observations.

¹ Read at the meeting of the American Ornithologists' Union, Philadelphia Pa., Dec. 12, 1907.

² See 'The Auk,' Vol. XXII, No. 2, April, 1904, pp. 194-205.